

Clarion (Taiwan) Manufacturing Co., Ltd.

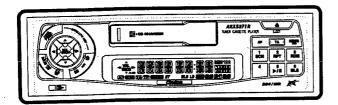
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# **Service Manual**



RDS-EON/FM-MPX/MW/LW
Radio Cassette Combination
with CD Changer Control

Model

ARX5371R

(PE-1598E-A)

### ■ ORIGINAL SERVICE MANUAL

This additional service manual is designed to be used together with Model PE-1531E

Original model	Manual No.
ARX5370R (PE-1531E)	298-5583-00

# ■ DIFFERENCE FROM ORIGINAL MODEL

- 1.EXPLODED VIEW · PARTS LIST
- 2.ELECTRICAL PARTS LIST
- 3.CIRCUIT DIAGRAM
- 4.PRINTED WIRING BOARD

### **■ COMPONENTS**

PE-1598E-A

Main Unit		1
Mounting Bracket	300-9677-00	1
Outer-Es	370-9006-35	1
A-Lead	850-6688-50	1
DCP Case	335-5331-00	1
Part's Bag		
Hook Plate	331-0488-00	2
(alternative part	330-8216-01	2)
Cable Tie	335-0833-07	1
Spacer	345-3653-01	1
Screw	716-0726-01	1

# ■ To engineers in charge of repair or inspection of our products.

Before repair or inspection, make sure to follow the instructions so that customers and Engineers in charge of repair or inspection can avoid suffering any risk or injury.

1.Use specified parts.

The system uses parts with special safety features against fire and voltage. Use only parts with equivalent characteristics when replacing them.

The use of unspecified parts shall be regarded as remodeling for which we shall not be liable. The onus of product liability (PL) shall not be our responsibility in cases where an accident or failure is as a result of unspecified parts being used.

2.Place the parts and wiring back in their original po sitions after replacement or re-wiring.

For proper circuit construction, use of insulation tubes, bonding, gaps to PWB, etc, is involved. The wiring connection and routing to the PWB are specially planned using clamps to keep away from heated and high voltage parts. Ensure that they are placed back in their original positions after repair or inspection.

If extended damage is caused due to negligence during repair, the legal responsibility shall be with the repairing company.

3. Check for safety after repair.

Check that the screws, parts and wires are put back securely in their original position after repair. Ensure for safety reasons there is no possibility of secondary ploblems around the repaired spots.

If extended damage is caused due to negligence of repair, the legal responsibility shall be with the repairing company.

4.Caution in removal and making wiring connection to the parts for the automobile. Disconnect the battery terminal after turning the ignition key off. If wrong wiring connections are made with the battery connected, a short circuit and/or fire may occur. If extensive damage is caused due to negligence of repair, the legal responsibility shall be with the repairing company.

5. Cautions regarding chips.

Do not reuse removed chips even when no abnormality is observed in their appearance. Always replace them with new ones. (The chip parts include resistors, capacitors, diodes, transistors, etc). The negative pole of tantalum capacitors is highly sus-

ceptible to heat, so use special care when replacing them and check the operation afterwards.

6. Cautions in handing flexible PWB

Before working with a soldering iron,make sure that the iron tip temperature is around 270°C. Take care not to apply the iron tip repeatedly(more than three times) to the same patterns. Also take care not to apply the tip with force.

7.Turn the unit OFF during disassembly and parts replacement.Recheck all work before you apply power to the unit.

### ■ ELECTRICAL PARTS LIST:

### • ARX5371R(PE-1598E-A)

Main PWB section

M	lain PWE	3 section								
REF No.	PART No.	DESCRIPTION	RE	F No.	PART No.	DESCRIPTION	RE	F No.	PART No.	DESCRIPTION
IC 201	051-1819-50	SAA6579T	Q	805	125-2003-02	RN1202	C	105	178-1022-05	50V 1000PF
IC 202	051-0350-55	BA4558	Q	806	125-0003-02	RN2202	C	106	180-1053-63	50V 1 µ F
IC 203	051-6201-00	LC72146	D	101	001-0376-69	MTZ18JB	C	107	178-2732-05	25V 0.027 µ F
IC 301	051-1014-10	TA7291S	D	102	001-0330-00	1SS119	C	108	178-2732-05	25V 0.027 μ F
IC 501	052-1906-01	uPD178016	D	103	001-0330-00	1SS119	C	109	178-1522-05	50V 1500PF
IC 502	051-0160-01	HD74LS07P	D	104	001-0376-69	MTZ18JB	C	110	178-1032-05	25V 0.01 μ F
IC 701	051-5008-00	M62419FP	D	201	001-0330-00	1SS119	C	111	178-6822-05	50V 6800PF
IC 801	051-2009-00	TDA8561Q	D	202	001-0330-00	1SS119	C	112	178-1032-05	25V 0.01 μ F
IC 802	051-2009-00	TDA8561Q	D	301	001-0376-43	MTZ8.2JA	С	113	178-1032-05	25V 0.01 μ F
Q 101	108-0669-00	2SK669	D	302	001-0330-00	1SS119	C	114	184-2273-22	10V 220 μ F
Q 102	100-1548-00	2SA1548	D	501	001-0330-00	1SS119	C	115	178-1222-05	50V 1200PF
Q 103	100-1548-00	2SA1548	D	503	001-0330-00	1SS119	С	116	178-4732-05	25V 0.047 μ F
Q 201	125-0003-02	RN2202	D	504	001-0330-00	1SS119	C	117	183-3343-61	50V 0.33 μ F
Q 202	103-1450-00	2SD1450	D	601	001-0376-33	MTZ5.6JC	C	118	178-1032-05	25V 0.01 μ F
Q 203	125-0003-02	RN2202	D	602	001-0330-00	1SS119	C	119	178-8222-05	50V 8200PF
Q 204	125-2003-02	RN1202	Þ	603	001-0330-00	1SS119	C	201	176-3311-00	50V 330PF
Q 205	125-2003-02	RN1202	D	604	001-0376-48	MTZ9.1JC	C	202	176-3311-00	50V 330PF
Q 301	101-1243-00	2SB1243	D	605	001-0376-48	MTZ9.1JC	C	203	176-8201-00	50V 82PF
Q 302	125-2003-06	RN1206	D	606	001-0376-36	MTZ6.2JC	C	204	176-4701-00	50V 47PF
Q 303	101-1243-00	2SB1243	D	608	001-0376-45	MTZ8.2JC	C	205	178-1042-05	25V 0.1 μ F
Q 304	125-2003-06	RN1206	D	609	001-0330-00	1SS119	C	206	183-2253-61	50V 2.2 μ F
Q 501	125-0003-02	RN2202	D	610	001-0330-00	1SS119	C	207	183-1063-31	16V 10 µ F
Q 502	102-2458-51	2SC2458	D	611	001-0466-00	S5688	C	208	176-5611-00	50V 560PF
Q 504	125-2003-02	RN1202	D	612	001-0330-00	1SS119	C	209	176-5611-00	50V 560PF
Q 601	101-1237-00	2SB1237	D	613	001-0330-00	1SS119	C	210	176-5611-00	50V 560PF
Q 602	102-1846-50	2SC1846	D	701	001-0376-23	MTZ4.3JB	C	211	178-2232-05	25V 0.022 µ F
Q 603	103-1858-00	2SD1858	D	801	001-0376-29	MTZ5.1JB	C	212	178-2232-05	25V 0.022 µ F
Q 604	103-1858-00	2SD1858	D	802	001-0330-00	1SS119	C	213	178-1032-05	25V 0.01 µ F
Q 605	103-1858-00	2SD1858	D	803	001-0188-01	1S1885A	C	214	177-3312-05	50V 330PF
Q 606	103-1858-00	2SD1858	JL.	101	010-9000-05		C	215	178-1042-05	25V 0.1 μ F
Q 607	125-0003-02	RN2202	L	102	010-9000-05	5.6 μ H	C	216	182-4743-63	50V 0.47 μ F
Q 608	102-2458-51	2SC2458	ĮL.	201	010-9000-01	120 µ H	C	217	176-2701-00	50V 27PF
Q 609	101-1243-00	2SB1243	L	501	010-9000-01	120 μ H	С	218	176-2701-00	50V 27PF
Q 610	125-2003-02	RN1202	L	502	010-9000-01	120 µ H	C	219	183-2253-61	50V 2.2 μ F
Q 611	100-1048-00	2SA1048	JL.	601	010-9000-01	120 μ H	C	220	176-1011-00	50V 100PF
Q 612	101-1237-00	2SB1237	L	801	009-9006-50		C	221	176-1011-00	50V 100PF
Q 613	125-2003-02	RN1202	X	201	061-9001-50	4.332MHz	C	222	176-1011-00	50V 100PF
Q 614	125-2003-02	RN1202	X	202	061-9002-50	7.2MHz	C	223	176-1011-00	50V 100PF
Q 615	125-2003-02	RN1202	Х	501	060-1023-00	4.5MHz	C	224	178-1032-05	25V 0.01 # F
Q 618	125-2003-02	RN1202	C	101	174-1800-13	50V 18PF	C	225	183-4763-11	6.3V 47 μ F
Q 619	125-0003-02	RN2202	c	102	178-1032-05	25V 0.01 μ F	C	226	178-1042-05	25V 0.1 μ F
Q 803	103-1450-00	2SD1450	C	103	178-1032-05	25V 0.01 μ F	C		177-1042-05	· · · · · · · · · · · · · · · · · · ·
Q 804	103-1450-00	2SD1450	C	104	042-9003-00	10V 100 μ F	C	302	177-1022-05	50V 1000PF
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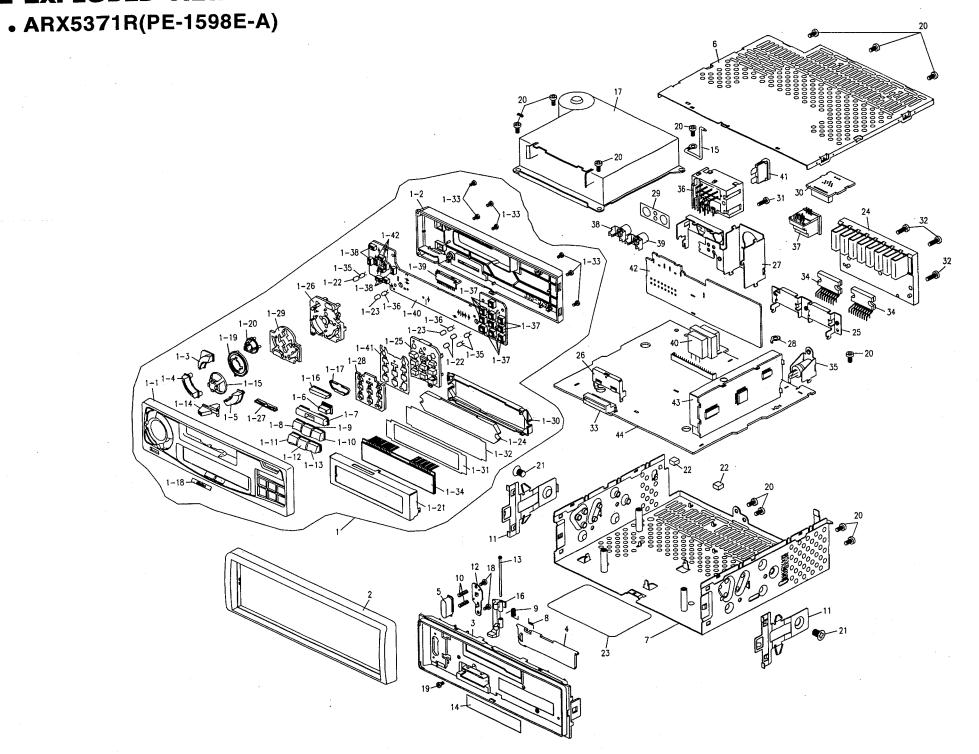
RE	F No.	PART No. DESCRIPTION	R	EF No.	PART No. DESCRIPTION	RI	F No.	PART No. DESCRIPTION
C	303	182-1073-33 16V 100 μ F	С	727	182-4763-23 10V 47 μ F	R	305	111-6811-81 1/2WS 680 Ω
lc	304	177-1022-05 50V 1000PF	C	801	173-1042-10 50V 0.1 μ F	R	306	111-1031-91 1/4WSS 10KΩ
c	305	177-1022-05 50V 1000PF	C	802	042-9002-00 50V 0.47 μ F(LN)	R	307	117-1031-10 1/10W 10KΩ
c	306	178-1022-05 50V 1000PF	C	803	042-9002-00 50V 0.47 μ F(LN)	R	501	111-2221-91 1/4WSS 2.2KΩ
c	307	178-1022-05 50V 1000PF	C	804	042-9002-00 50V 0.47 μ F(LN)	R	502	111-2221-91 1/4WSS 2.2KΩ
c	308	178-1022-05 50V 1000PF	C	805	042-9002-00 50V 0.47 μ F(LN)	R	503	117-4721-10 1/10W 4.7KΩ
c	309	178-1022-05 50V 1000PF	c	806	042-0447-00 16V 2200 μ F	R	504	117-5621-10 1/10W 5.6KΩ
c	310	178-1022-05 50V 1000PF	c	809	183-1063-31 16V 10 μ F	R	505	117-1031-10 1/10W 10KΩ
С	311	178-1032-05 25V 0.01 µ F	С	810	183-1063-31 16V 10 μ F	R	506	117-1031-10 1/10W 10KΩ
C	409	182-2253-63 50V 2.2 μ F	c	811	178-1022-05 50V 1000PF	R	507	117-1021-10 1/10W 1KΩ
c	410	182-2253-63 50V 2.2 μ F	С	812	178-2232-05 25V 0.022 μ F	R	508	117-1031-10 1/10W 10KΩ
c	501	178-1032-05 25V 0.01 µ F	R	101	117-7531-10 1/10W 75KΩ	R	509	117-1031-10 1/10W 10KΩ
c	502	176-2201-00 50V 22PF	R	102	117-1831-10 1/10W 18KΩ	R	510	117-1031-10 1/10W 10KΩ
С	503	178-1032-05 25V 0.01 μ F	R	103	117-1021-10 1/10W 1KΩ	R	511	117-1031-10 1/10W 10KΩ
c	504	182-4763-23 10V 47 µ F	R	104	117-5631-10 1/10W 56KΩ	R	512	111-1031-91 1/4WSS 10KΩ
c	505	177-4732-05 25V 0.047 μ F	R	105	117-1231-10 1/10W 12KΩ	R	513	117-1031-10 1/10W 10KΩ
c	506	178-1032-05 25V 0.01 µ F	R	106	117-1021-10 1/10W 1KΩ	R	514	117-1031-10 1/10W 10KΩ
C	507	184-1073-29 10V 100 μ F	R	107	117-2231-10 1/10W 22KΩ	R	515	117-1031-10 1/10W 10KΩ
c	509	178-4732-05 25V 0.047 µ F	R	108	117-4721-10 1/10W 4.7KΩ	R	516	117-4731-10 1/10W 47KΩ
С	602	042-9003-00 10V 100 μ F	R	109	117-2241-10 1/10W 220KΩ	R	517	117-2231-10 1/10W 22KΩ
C	603	171-1032-06 25V 0.01 µ F	R	110	117-1031-10 1/10W 10KΩ	R	521	117-1021-10 1/10W 1KΩ
C	604	180-1063-53 35V 10 µ F	R	111	116-2221-10 1/8W 2.2KΩ	R	522	116-1021-10 1/8W 1KΩ
С	605	182-4763-23 10V 47 μ F	R	112	111-1031-91 1/4WSS 10KΩ	R	523	117-1021-10 1/10W 1KΩ
C	606	182-1063-33 16V 10 µ F	R	113	111-1031-91 1/4WSS 10KΩ	R	524	117-1021-10 1/10W 1KΩ
c	607	171-1032-06 25V 0.01 µ F	R	114	111-2221-91 1/4WSS 2.2KΩ	R	525	117-1021-10 1/10W 1KΩ
C	608	178-1032-05 25V 0.01 μ F	R		116-2221-10 1/8W 2.2KΩ	R	526	117-1021-10 1/10W 1KΩ
c	610	171-1032-06 25V 0.01 µ F	R	116	117-1231-10 1/10W 12KΩ	R	527	117-1021-10 1/10W 1KΩ
c	701	182-1063-33 16V 10 µ F	R	117	111-2711-91 1/4WSS 270Ω	R	528	111-1001-91 1/4WSS 10 Ω
C	702	183-2253-61 50V 2.2 μ F	R	118	111-3311-91 1/4WSS 330 Ω	R	529	117-1021-10 1/10W 1KΩ
c	703	178-4732-05 25V 0.047 μ F	R	201	117-1031-10 1/10W 10KΩ	R	601	111-1021-91 1/4WSS 1KΩ
C	704	183-2253-61 50V 2.2 μ F	R	202	117-1031-10 1/10W 10KΩ	R	602	111-1031-91 1/4WSS 10KΩ
c	705	182-1063-33 16V 10 µ F	R	203	117-2221-10 1/10W 2.2KΩ	R	603	117-2231-10 1/10W 22KΩ
c	706	184-1073-29 10V 100 μ F	R	204	117-3331-10 1/10W 33KΩ	R	604	117-1231-10 1/10W 12KΩ
C	707	174-5600-13 50V 56PF	R	205	117-3321-10 1/10W 3.3KΩ	R	605	111-1021-91 1/4WSS 1KΩ
C	708	176-1511-00 50V 150PF	R	206	117-2231-10 1/10W 22KQ	R	606	111-2291-91 1/4WSS 2.2Ω
C	709	182-4753-63 50V 4.7 μ F	R	207	117-1031-10 1/10W 10KΩ	R	607	111-2291-91 1/4WSS 2.2 Q
c	710	178-8232-05 25V 0.082 μ F	R	208	117-1231-10 1/10W 12KΩ	R	608	111-4711-81 1/2WS 470 Ω
c	711	182-2253-63 50V 2.2 µ F	R	209	117-3331-10 1/10W 33KΩ	R	609	111-2291-91 1/4WSS 2.2Ω
	712	182-2263-33 16V 22 µ F	R	210	117-1021-10 1/10W 1KΩ	R	610	111-2291-91 1/4WSS 2.2Ω
- 1	713	178-5622-05 50V 5600PF	R	211	117-2211-10 1/10W 220 Ω	R	611	111-4711-81 1/2WS 470 Ω
c	714	178-5632-05 25V 0.056 μ F	R	212	117-1041-10 1/10W 100KΩ	R	612	117-1041-10 1/10W 100KΩ
		178-5622-05 50V 5600PF	R	213	117-2221-10 1/10W 2.2KΩ	R	613	117-1041-10 1/10W 100KΩ
lc	716	182-1063-33 16V 10 µ F	R	214	117-1021-10 1/10W 1KΩ	R	614	111-5611-81 1/2WS 560 Ω
C	717	174-5600-13 50V 56PF	R	215	117-1021-10 1/10W 1KΩ	R	615	111-1031-91 1/4WSS 10KΩ
C	718	1.76-1511-00 50V 150PF	R	216	117-1021-10 1/10W 1KΩ	R	616	117-1031-10 1/10W 10KΩ
C	719	182-4753-63 50V 4.7 μ F	R	217	117-1021-10 1/10W 1KΩ	R	617	111-1591-91 1/4WSS 1.5Ω
c	720	178-8232-05 25V 0.082 μ F	R	218	117-1031-10 1/10W 10KΩ	R	618	111-1591-91 1/4WSS 1.5Ω
C		182-2253-63 50V 2.2 μ F	R	219	117-1031-10 1/10W 10KΩ	R	619	111-1591-91 1/4WSS 1.5Ω
c	722	182-2263-33 16V 22 µ F		220	117-1031-10 1/10W 10KΩ	R	620	111-1591-91 1/4WSS 1.5Ω
c	723	178-5622-05 50V 5600PF		301	111-6811-81 1/2WS 680Ω	R	621	117-1031-10 1/10W 10KΩ
C		178-5632-05 25V 0.056 µ F	R		111-1031-91 1/4WSS 10KΩ	R	622	111-2221-91 1/4WSS 2.2KΩ
c	725	178-5622-05 50V 5600PF	R		114-2291-11 1WS 2.2 Ω	R	623	111-1031-91 1/4WSS 10KΩ
C		182-1063-33 16V 10 µ F		304	111-2221-91 1/4WSS 2.2KΩ	R	624	111-1221-91 1/4WSS 1.2KΩ
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RE	F No.	PART No.	DESCRIPTION	RI	EF No.	PART No.	DESCRIPTION	REF No	. PART No.	DESCRIPTION
R	625	117-4721-10	1/10W 4.7KΩ	R	709	117-6831-10	1/10W 68KΩ	R 813	117-1031-10	1/10W 10KΩ
R	626	116-2231-10	1/8W 22KΩ	R	710	117-6821-10	1/10W 6.8KΩ	R 814	117-3311-10	1/10W 330 Ω
R	629	117-1531-10	1/1 0W 15KΩ	R	711	117-1231-10	1/10W 12KΩ	R 815	117-3311-10	1/10W 330Ω
R	630	111-4711-91	1/4WSS 470Ω	R	712	117-4721-10	1/10W 4.7KΩ	R 816	117-5621-10	1/10W 5.6KΩ
R	633	117-1041-10	1/1 0W 100KΩ	R	713	117-2431-10	1/10W 24KΩ	R 817	117-5621-10	1/10W 5.6KΩ
R	701	117-4731-10	1/10W 47KΩ	R	714	117-6821-10	1/10W 6.8KΩ	CN 101	074-1112-00	OUTET SOCKET
R	702	117-6831-10	1/10W 68KΩ	R	715	111-3311-91	1/4WSS 330 Ω	CN 102	076-0433-20	PLUG
R	703	117-6821-10	1/10W 6.8KΩ	R	801	117-3321-10	1/10W 3.3KΩ	CN 103	074-1022-01	OUTET SOCKET
R	704	117-1231-10	1/10W 12KΩ	R	802	117-4721-10	1/10W 4.7KΩ	CN 104	074-1115-10	OUTET SOCKET
R	705	117-4721-10	1/10W 4.7KΩ	R	803	117-4721-10	1/10W 4.7KΩ	CN 105	075-9004-00	JACK(WHITE)
R	706	117-2431-10	1/10W 24KΩ	R	804	117-4721-10	1/10W 4.7KΩ	CN 106	075-9003-00	RCA JACK(RED)
R	707	117-6821-10	1/10W 6.8KΩ	R	805	117-4721-10	1/10W 4.7KΩ		]	
R	708	117-4731-10	1/10W 47KΩ	R	812	117-1031-10	1/10W 10KΩ			

### Switch PWB section

RE	F No.	PART No.	DESCRIPTION	RE	F No.	PART No.	DESCRIPTION	RE	F No.	PART No.	DESCRIPTION
IC	101	051-6013-00	LC75854W	PL	. 102	017-0441-00	9V 85mA	s	110	013-3812-11	SKQCAC(260G)
С	101	178-1022-05	50V 1000P	PL	. 103	017-0444-00	14V 50mA	s	111	013-6002-50	SKHVBC3430CR
C	102	178-4735-06	25V 0.047 μ F	PL	. 104	017-0444-00	14V 50mA	s	112	013-6002-50	SKHVBC3430CR
С	103	178-4735-06	25V 0.047 μ F	PL	. 105	017-0444-00	14V 50mA	s	113	013-6001-50	SKQCAB
C	104	178-4735-06	25V 0.047 <i>μ</i> F	s	101	013-6002-50	SKHVBC3430CR	s	114	013-6001-50	SKQCAB
R	101	117-2221-10	1/10W 2.2KΩ	s	102	013-6002-50	SKHVBC3430CR	s	115	013-6001-50	SKQCAB
R	102	117-2221-10	1/10W 2.2KΩ	s	103	013-6002-50	SKHVBC3430CR	s	116	013-6002-50	SKHVBC3430CR
R	103	117-2221-10	1/10W 2.2KΩ	S	104	013-3812-11	SKQCAC(260G)	s	117	013-3812-11	SKQCAC(260G)
R	104	117-4731-10	1/10W 47KΩ	s	105	013-6001-50	SKQCAB	s	118	013-3812-11	SKQCAC(260G)
R	105	117-1031-10	1/10W 10KΩ	S	106	013-6002-50	SKHVBC3430CR	s	119	013-6002-50	SKHVBC3430CR
R	106	117-1241-10	1/10W 120KΩ	s	107	013-6002-50	SKHVBC3430CR	CI	l 101	076-0522-00	PLUG
R	107	117-3921-10	1/10W 3.9KΩ	s	107.	013-6002-50	SKHVBC3430CR				
PL	101	017-0441-00	9V 85mA	s	109	013-3812-11	SKQCAC(260G)	L			

# ■ EXPLODED VIEW · PARTS LIST:



No.	PART No.	DESCRIPION	Q'TY
1	940-1883A	ES ASSY	1
1-1	370-5643-02	ESCUTCHEON	1
1-2	335-5294-00	REAR COVER	1
1-3	382-4393-20	BUTTON(FUNC/POWER)	1
1-4	382-4394-22	BUTTON(BAND/A-M)	1
1-5	382-4396-21	BUTTON(UP/DOWN)	1
1-6	382-4413-20	BUTTON(TA)	1
1-7	382-4414-20	BUTTON(AF/NEWS)	1
1-8	382-4418-21	BUTTON(1)	1
1-9	382-4419-21	BUTTON(2)	1
1-10	382-4420-21	BUTTON(3)	1

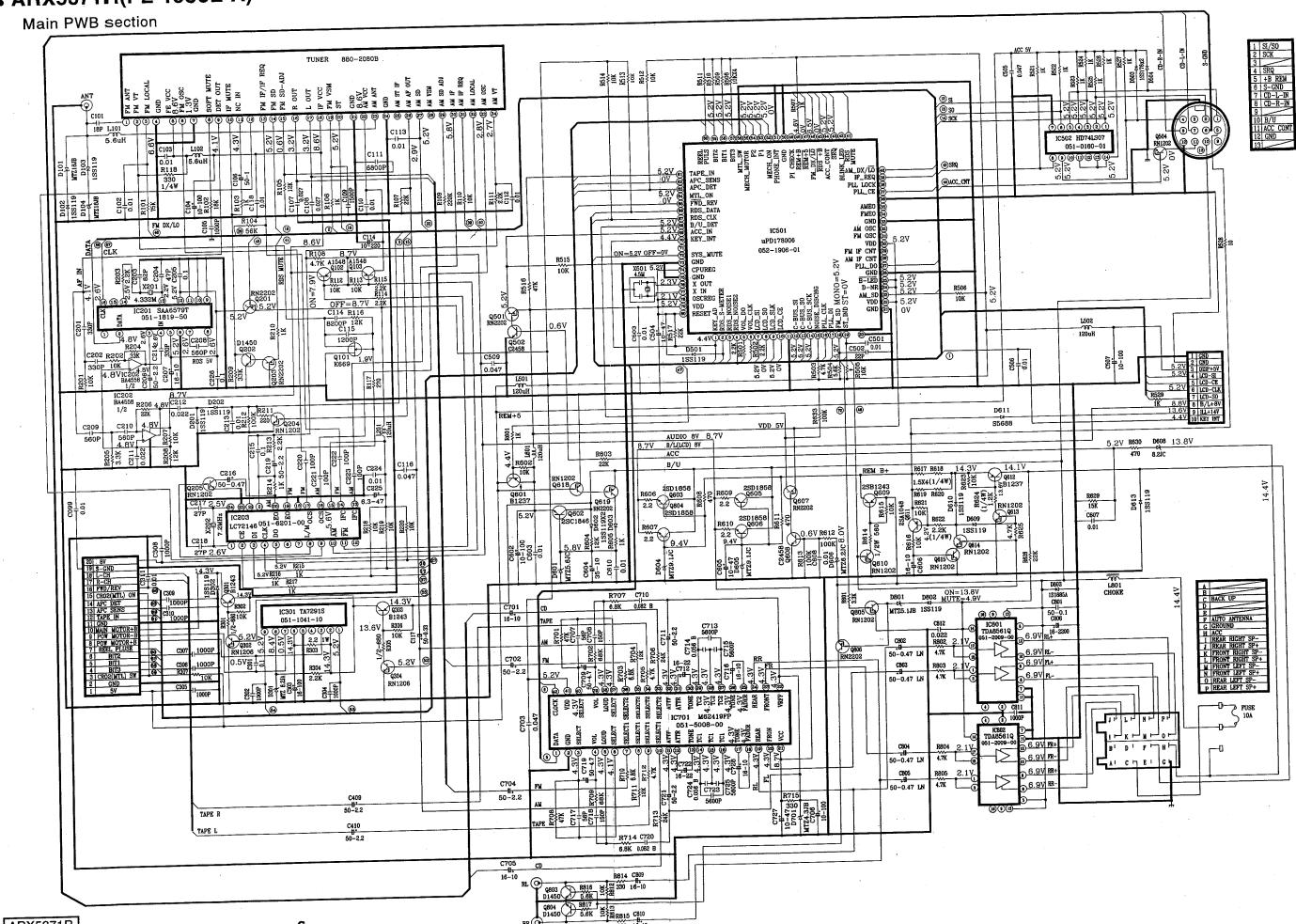
1-11	382-4421-22	BUTTON(4)	1
1-12	382-4422-21	BUTTON(5)	1
1-13	382-4423-23	BUTTON(6)	1
1-14	382-4470-00	BUTTON(RELEASE)	1
1-15	380-5394-20	KNOB(VOL)	1
1-16	382-4468-00	BUTTON(EJE)	1
1-17	335-5301-00	BUTTON HOLDER	1
1-18	378-0134-00	BADGE	1
1-19	335-5297-00	JOG PLATE	1
1-20	335-5298-00	JOG ARM	1
1-21	331-1999-00	LCD COVER	1
1-22	345-4441-37	LAMP CAP(BLUE)	3

1-23	345-4441-81	LAMP CAP(YELLOW)	2
1-24	335-5308-00	LCD ILLUMINATION PLATE	1
1-25	335-5304-00	ILLUMINATION PLATE(R)	1
1-26	335-5307-00	ILLUMINATION PLATE(L)	1
1-27	335-4874-00	ILLUMI-PLATE(DOOR)	1
1-28	345-7818-01	SPONGE(L)	1
1-29	345-7815-00	SPONGE(R)	1
1-30	335-5309-00	LCD HOLDER	1
1-31	347-5366-00	FILM(LCD)(MYLAR)	1
1-32	347-5365-00	SHADE(LCD)(KIMOTO)	1
1-33	716-1721-00	P-TIGHT SCREW	7
1-34	379-1103-41	LCD	1

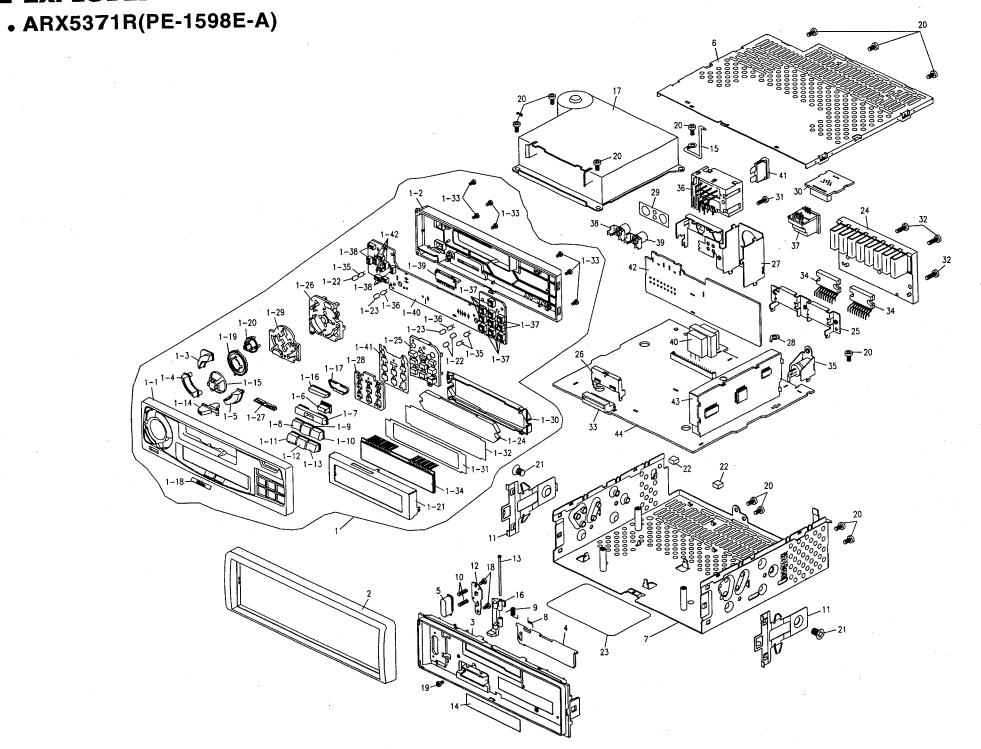
No.	PART No.	DESCRIPION	Q'TY
1-35	017-0444-00	PILOT LAMP(14V 50mA)	3
1-36	017-0441-00	PILOT LAMP(9V 85mA)	2
1-37	013-6002-50	TACT SWITCH	10
1-38	013-3812-11	TACT SWITCH	5
1-39	076-0522-00	PLUG	1
1-40	039-0847-00	SWITCH PWB	1
1-41	347-5402-00	SHADE(R)	1
1-42	013-6001-50	TACT SWITCH	4
2	370-9006-32	OUT-ESCUTCHEON	1
3	370-5653-02	INNER ESCUTCHEON	1
4	320-0526-28	DUSTPROOF COVER	1
5	382-4078-00	BUTTON(PUSH-OUT)	1
6	310-1571-00	UPPER CASE	1
7	311-1697-01	LOWER CASE	1
8	750-3217-00	SPRING(DOOR)	1
9	750-3219-00	SPRING(HOOK)	1
10	750-3173-00	SPRING(PUSH-OUT)	2
11	750-3173-00	SPRING	2
12	331-0588-20	SPRING HOLDER	1
13	341-1627-00	SHAFT	1
14	291-0067-00	STICKER	1 1
15	850-6688-50	A-LEAD	1
16	335-5312-00	HOOK	1
17	930-0738-81		1
<u> </u>		WAVE SCREW	2
18	716-0778-00	MACHINE SCREW	1
20	714-2004-19	MACHINE SCREW	12
21	714-5005-60	MACHINE SCREW	2
	345-7560-00	RUBBER PART	2
22		SET PLATE	1
23	286-8894-01	HEAT SINK	1
24	313-1616-00	CONN-HOLDER	1
25	331-0613-00	DCP CONN. BRACKET	1 -
26	331-0606-00		1
27	331-1856-20	CONNECTOR HOLDER	1
28	331-0643-00	EARTH PLATE	1
29	347-5100-00	SPACER(RCA)	1 1
30	039-0428-00	PWB(C-BUS)	1
31	714-2610-10	MACHINE SCREW	
32	714-3010-80	MACHINE SCREW	3
33	074-1112-00	DCP CONNECTOR(F)	1
34	051-2009-00	POWER IC	2
35	092-9000-01	ANT. RECEPT	<del></del>
36	074-1115-10	OUTLET SOCKET	1
37	074-1022-01	CONNECTOR(13 PIN)	1
38	075-9004-00	RCA JACK(RED)	1
39	075-9003-00	RCA JACK(WHITE)	1
40	009-9006-50	CHOKE	1 1
41	060-0057-56	AUTO FUSE	1
42	039-0841-00	CONNECTOR PWB	1
43	880-2080B	TUNER ASSY	1
44	039-1065-01	MAIN PWB	1 1

## **■ CIRCUIT DIAGRAM:**

• ARX5371R(PE-1598E-A)



# ■ EXPLODED VIEW · PARTS LIST:



No.	PART No.	DESCRIPION	Q'TY
1	940-1883A	ES ASSY	1
1-1	370-5643-02	ESCUTCHEON	1
1-2	335-5294-00	REAR COVER	1
1-3	382-4393-20	BUTTON(FUNC/POWER)	1
1-4	382-4394-22	BUTTON(BAND/A-M)	1
1-5	382-4396-21	BUTTON(UP/DOWN)	11
1-6	382-4413-20	BUTTON(TA)	1
1-7	382-4414-20	BUTTON(AF/NEWS)	1
1-8	382-4418-21	BUTTON(1)	1
1-9	382-4419-21	BUTTON(2)	1
1-10	382-4420-21	BUTTON(3)	1

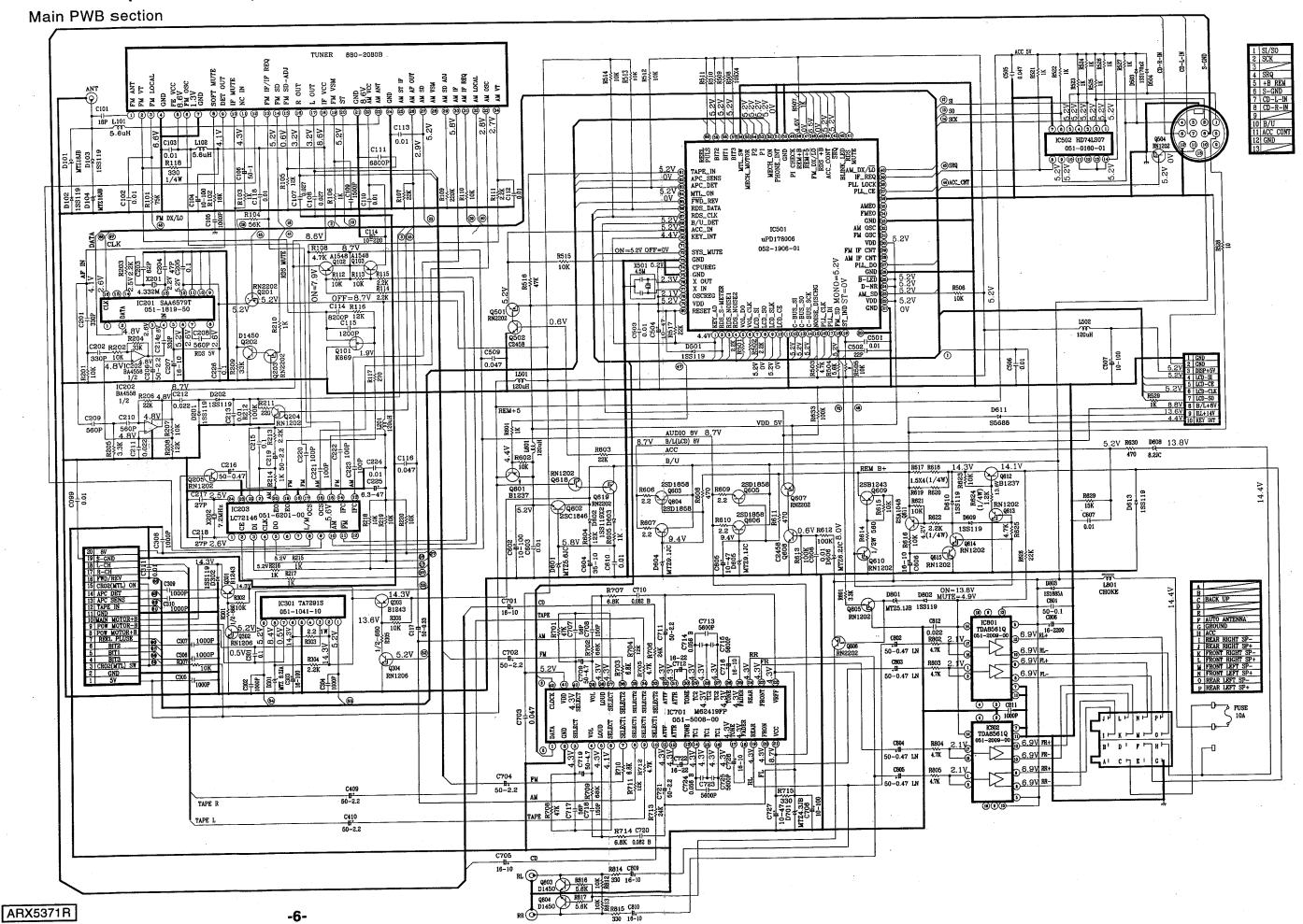
1-11	382-4421-22	BUTTON(4)	1
1-12	382-4422-21	BUTTON(5)	1
1-13	382-4423-23	BUTTON(6)	1
1-14	382-4470-00	BUTTON(RELEASE)	1
1-15	380-5394-20	KNOB(VOL)	1
1-16	382-4468-00	BUTTON(EJE)	1
1-17	335-5301-00	BUTTON HOLDER	1
1-18	378-0134-00	BADGE	1
1-19	335-5297-00	JOG PLATE	1
1-20	335-5298-00	JOG ARM	1
1-21	331-1999-00	LCD COVER	1
1-22	345-4441-37	LAMP CAP(BLUE)	3

1-23	345-4441-81	LAMP CAP(YELLOW)	2
1-24	335-5308-00	LCD ILLUMINATION PLATE	1
1-25	335-5304-00	ILLUMINATION PLATE(R)	1
1-26	335-5307-00	ILLUMINATION PLATE(L)	1
1-27	335-4874-00	ILLUMI-PLATE(DOOR)	1.
1-28	345-7818-01	SPONGE(L)	11
1-29	345-7815-00	SPONGE(R)	1
1-30	335-5309-00	LCD HOLDER	1
1-31	347-5366-00	FILM(LCD)(MYLAR)	1
1-32	347-5365-00	SHADE(LCD)(KIMOTO)	1
1-33	716-1721-00	P-TIGHT SCREW	7
1-34	379-1103-41	LCD	1

Γ	No.	PART No.	DESCRIPION	Q'TY
Ì	1-35	017-0444-00	PILOT LAMP(14V 50mA)	3
Ī	1-36	017-0441-00	PILOT LAMP(9V 85mA)	2
ı	1-37	013-6002-50	TACT SWITCH	10
ı	1-38	013-3812-11	TACT SWITCH	5
ı	1-39	076-0522-00	PLUG	1
ı	1-40	039-0847-00	SWITCH PWB	1
Ì	1-41	347-5402-00	SHADE(R)	1
	1-42	013-6001-50	TACT SWITCH	4
	2	370-9006-32	OUT-ESCUTCHEON	1
	3	370-5653-02	INNER ESCUTCHEON	1
	4	320-0526-28	DUSTPROOF COVER	1
	5	382-4078-00	BUTTON(PUSH-OUT)	1
	6	310-1571-00	UPPER CASE	1
	7	311-1697-01	LOWER CASE	1
	8	750-3217-00	SPRING(DOOR)	1
	9	750-3219-00	SPRING(HOOK)	1
	10	750-3173-00	SPRING(PUSH-OUT)	2
	11	750-3137-00	SPRING	2
	12	331-0588-20	SPRING HOLDER	1
	13	341-1627-00		1
		291-0067-00	STICKER	1
	15	850-6688-50		1
	16			1
	17	930-0738-81		1
	18		WAVE SCREW	2
	19	ļ	MACHINE SCREW	1
	20	714-3005-80	MACHINE SCREW	12
	21	714-5008-41	MACHINE SCREW	2
	22	345-7560-00	RUBBER PART	2
	23	286-8894-01	SET PLATE	1
	24	313-1616-00	HEAT SINK	1
	25	331-0613-00	CONN-HOLDER	1
	26	331-0606-00	DCP CONN. BRACKET	1
	27	331-1856-20	CONNECTOR HOLDER	1
		331-0643-00	EARTH PLATE	1
	29	347-5100-00	SPACER(RCA)	1
	30	039-0428-00	PWB(C-BUS)	1
	31	714-2610-10	MACHINE SCREW	1
	32	714-3010-80	MACHINE SCREW	3
	33	074-1112-00	DCP CONNECTOR(F)	1
	34	051-2009-00	POWER IC	2
	35	092-9000-01	ANT. RECEPT	1
	36	074-1115-10	OUTLET SOCKET	1
	37	074-1113-10	CONNECTOR(13 PIN)	1
	38	075-9004-00	RCA JACK(RED)	1
	39	075-9003-00	RCA JACK(WHITE)	+ -
	40	009-9006-50	CHOKE	+ -
	41	060-0057-56	AUTO FUSE	+ +
	41	039-0841-00	CONNECTOR PWB	+;
		880-2080B	TUNER ASSY	1 1
	43	039-1065-01	MAIN PWB	1
	44	038-1005-01	INVIN EAAD	

### **CIRCUIT DIAGRAM:**

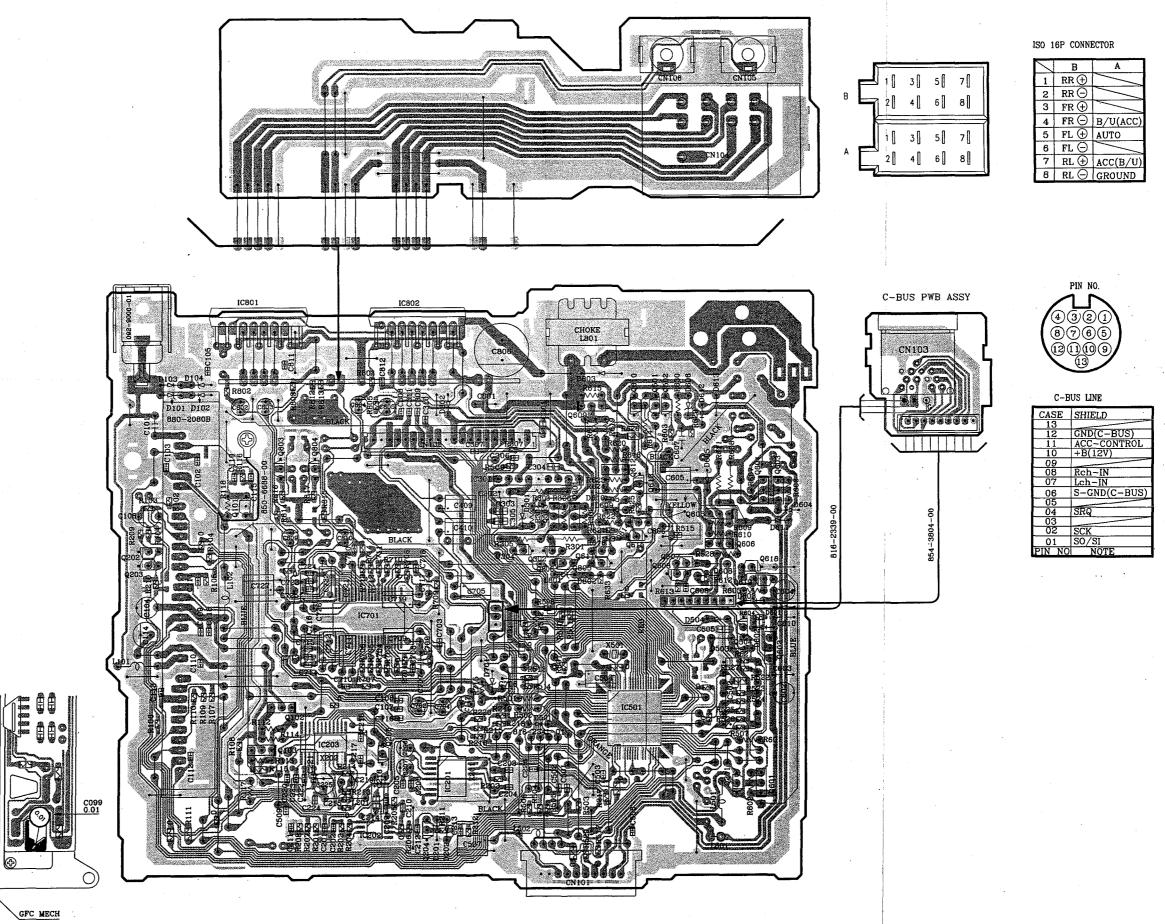
• ARX5371R(PE-1598E-A)



# ■ PRINTED WIRING BOARD:

# • ARX5371R(PE-1598E-A)

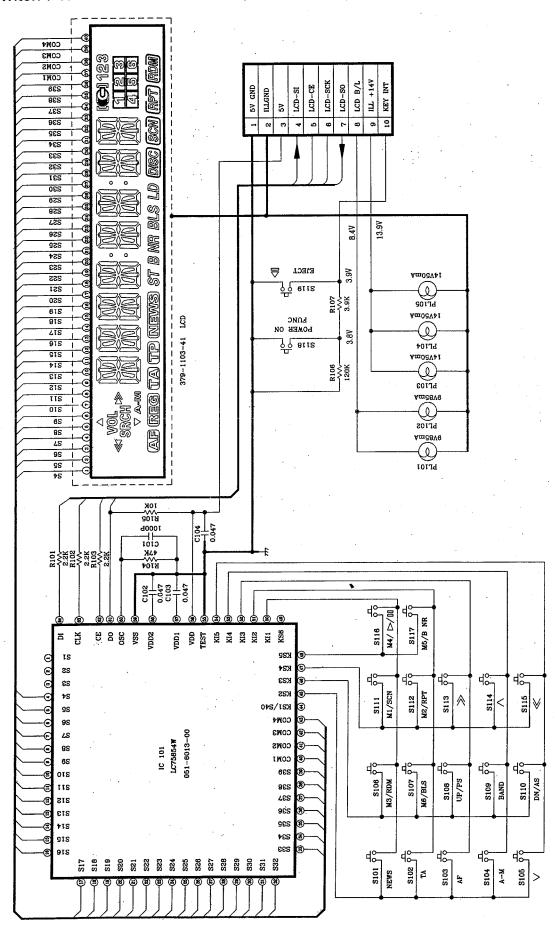
Main PWB section



## ■ CIRCUIT DIAGRAM:

• ARX5371R(PE-1598B-A)

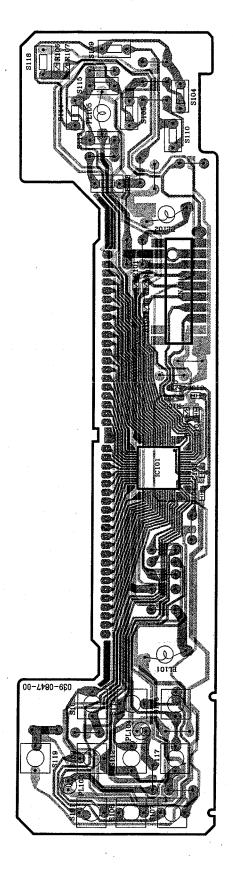
Switch PWB section



### ■ PRINTED WIRING BOARD:

• ARX5371R(PE-1598E-A)

Switch PWB section





Clarion Co., Ltd.

Export Division - 22-3, Shibuya 2-chome, Shibuyaku, Tokyo, 150 Japan Tel: 03-3400-1121 Service Dept. - 50 kamitoda, Toda-shi, Saltama, 335 Japan Tel: 048-443-1111 FAX: 048-433-6996

Published by Service Dept. 298-5583-00 Jan.1997 P Printed in Japan

# Service Manual

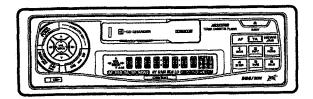


**CLAR-00406** 

RDS-EON/FM-MPX/MW/LW Radio Cassette Combination With CD Changer Control

Model ARX5370R

(PE-1531E)



### **SPECIFICATIONS**

Radio section

Tuning system:

PLL synthesizer tuner

Frequency range:

FM: 87.5MHz to 108MHz (0.05MHz steps) MW: 531kHz to 1602kHz (9kHz steps) LW: 153kHz to 279kHz (1kHz steps)

Tape section

Cassette type:

Compact audio cassette

Playback system:

Auto reversing 4-track,2-channel

streo cassette tape playback (monaural playback also possible)

Frequency range: 20Hz to 20kHz(metal)

Wow & flutter(WRMS):

0.06%

Channel separation(1kHz):

45dB

Signal to noise ratio:

58dB(metal)

67dB(Dolby B NR, metal)

Power amplifier section

Maximum power output:

120W(30W×4ch)

Effective power output(1% THD):

14W×4

### General

Power supply voltage:

DC14V(10.8V to 15.6V allowable)

negative ground

Power consumption:

Less than 10A

Speaker impedance:

 $4\Omega(4\Omega \text{ to } 8\Omega \text{ allowable})$ 

Line output(with CD changer 1kHz,  $10k\Omega$ ):

1.8V

Auto antenna rated current:

0.5A or less

Dimensions(mm):  $178(W) \times 50(H) \times 152(D)$ 

Weight:

1.3kg

- Specification and design are subject to change without notice for further improvement.
- Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
- \* "DOLBY" and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.

### LCOMPONENTS

### PF-1531E-A

Main unit	-
Mounting bracket	300-9677-00
Parts bag	
Hook plate	331-0488-00
(alternative part	330-8216-01 2
Cable tie	335-0833-07
Spacer	345-3653-01
Screw	716-0726-01
A-lead	850-6688-50
DCP case	335-5331-00

# ■ To engineers in charge of repair or inspection of our products.

Before repair or inspection, make sure to follow the instructions so that customers and Engineers in charge of repair or inspection can avoid suffering any risk or injury.

1. Use specified parts.

The system uses parts with special safety features against fire and voltage. Use only parts with equivalent characteristics when replacing them.

The use of unspecified parts shall be regarded as remodeling for which we shall not be liable. The onus of product liability (PL) shall not be our responsibility in cases where an accident or failure is as a result of unspecified parts being used.

2. Place the parts and wiring back in their original positions after replacement or re-wiring.

\* For proper circuit construction, use of insulation tubes, bonding, gaps to PWB, etc, is involved. The wiring connection and routing to the PWB are specially planned using clamps to keep away from heated and high voltage parts. Ensure that they are placed back in their original positions after repair or inspection. If extended damage is caused due to negligence during repair, the legal responsibility shall be with the repairing company.

3. Check for safety after repair.

Check that the screws, parts and wires are put back securely in their original position after repair. Ensure for safety reasons there is no possibility of secondary ploblems around the repaired spots.

If extended damage is caused due to negligence of repair, the legal responsibility shall be with the repairing company.

4. Caution in removal and making wiring connection to the parts for the automobile.

Disconnect the battery terminal after turning the ignition key off. If wrong wiring connections are made with the battery connected, a short circuit and/or fire may occur.If extensive damage is caused due to negligence of repair, the legal responsibility shall be with the repairing company.

5. Cautions regarding chips.

Do not reuse removed chips even when no abnormality is observed in their appearance. Always replace them with new ones. (The chip parts include resistors, capacitors, diodes, transistors, etc). The negative pole of tantalum capacitors is highly susceptible to heat, so use special care when replacing them and check the operation afterwards.

- 6. Cautions in handling flexible PWB Before working with a soldering iron, make sure that the iron tip temperature is around 270℃. Take care not to apply the iron tip repeatedly(more than three times)to the same patterns. Also take care not to apply the tip with force.
- 7. Turn the unit OFF during disassembly and parts replacement. Recheck all work before you apply power to the unit.

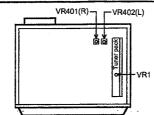
### ADJUSTMENT

Item	Procedure	Measuring instrument
S-meter	<ol> <li>Input the 98.1MHz/30dB μ (400Hz-MOD 30%)signal.</li> <li>Turn on the power swtch. and,Press the AF button and CH6 button at the same time.(TEST MODE)</li> </ol>	SG

### Tane section

Item	Procedure	Measuring instrument
Dolby level	1. Playback a Dolby level test tape(400Hz,200nWb/m), and connect the millivolt meter to TP1(R) and TP2(L). 2. Adjust VR401(R) and VR402(L) to obtain an output of 300mV±1dB.(Dolby SW:OFF)	Milli-volt meter Test tape

### Adjustment point (Top side of main unit)



### **TROUBLESHOOTING**

Problem	Cause	Measure
Power does not turn on.	Fuse is blown.	Replace with a fuse of the same amperage as the old fuse.
(or no sound is produced.)	Connections are improper.	Read the attached "installation/wire connection guide"once again and wire prperly.
Sound quality is poor.	Playback head is dirty.	Use a cleaning tape, etc. to clean the head.
No sound while unit can be operated.	Power ANT lead is shorted to the ground.	Turn the unit off, first.  Remove all connecting wires from the power ANT lead, and turn the unit on, then re-connect a wire one by one to the power ANT lead.  When sound is muted again, check the unit with a wire connected last.

This unit is equipped with a number of self-diagnosis functions to protect the system. If a problem should be occur, the user is warned through various error displays. Eliminate the problem using the procedures shown below.

Error display	Procedure
Er 2	This indicates that a problem has occured with the CD changer's mechanism (disc cannot be changed or ejected, etc.)  →The CD changer mechanism is likely damaged.
Er 3	This indicates that the pickup is out of focus during playback due to scratches on the disc, etc.
Er 6	This indicates that the CD's TOC (table of contents) cannot be read, for example because the selected disc is upside-down.
Er 8	This is displayed if a cassette tape gets stuck during loading or ejecting.  →Remove the cause for which the cassette tape got stuck.

If a display other than one of the displays avobe appears, press the reset button.

# **■EXPLANATION** OF IC

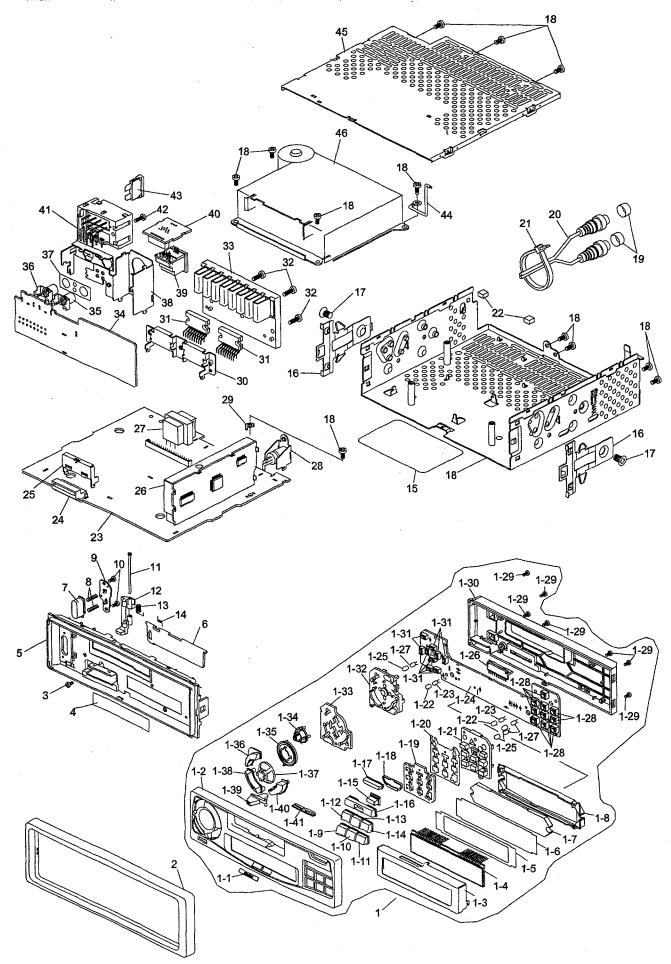
052-1906-00 **■**μPD178006GC-513-3B9 System Controller Outward Form 80 pins, plastic QFP

Ten	minal Description		: A24 -
No.	Symbol	I/O	Function
1	KEY AD	I	FUNC/EJECT/DCP detection terminal
2	RDS S METER	1	RDS S METER detection terminal
3	RDS NOISE 1	I	RDS NOISE detection terminal
4	N.C.	I	Not in use
5 6	VOL DO VOL CLK	0	Serial data communication line to electronic volume IC
7 8 9 10	LCD SI LCD SO LCD SCK LCD CE	I 0 0 0	Serial data communication line to LCD drive IC
11	N.C.	ĭ	Not in use
12 13 14	C-BUS SI C-BUS SO C-BUS SCK	I O O	C-BUS data communication line
15	NOISE DISCHG	0	NOISE OFF
16	PLL CLK	0	PLL CLK
17	PLL DI	0	PLL DI
18	FM SD	I	FM SD input
19	ST IND	I	"LOW" in FM STEREO
20	N.C.	I	Not in use
21	GND	<u> </u>	GND
22	VDD	-	VDD
23	AM SD	I	AM SD input terminal
24 25 26	N.C.	I	Not in use
27	PLL DO	I	PLL DO
28 29	AM IF CNT FM IF CNT	I	Not in use
30	VDD		VDD
31	FM OSC	I	FM VCO input terminal
32	AM OSC	I	AM VCO input terminal
33	GND	T	GND
34	FM EO AM EO	0	Not in use
35	VDD	+-	VDD
37	PLL CE	0	PLL CE
38	RDS DX/LO	0	Not in use
39	IF REQ	0	"HI" output in SEEK
40	AM DX/LO	0	AM DX/LOCAL output terminal, "HI" in LOCAL
41	RDS MUTE	0	MUTE output terminal for RDS
41	BLINK LED	0	BLINKING LED output terminal
42	SRQ	+	ACTIVE="LOW"
43	ACC CONT	0	ACC ON="HI", ACC OFF="LOW"
45	RDS +B	0	RDS+B
45	FM DX/LO	0	FM DX/LO output terminal, "LOW" in LOCAL
47	REM +5	0	PULL UP, LCD DRV power supply CONTROL terminal
48	REM +B	0	AUDIO system CONTROL power supply terminal
49	N.C.	I	Not in use
51	PHONT INT	I	"HI" while using TEL
52	MECH ON	0	MECHANISM ON SIGNAL
L			

No.	Symbol	I/O	Function
53 54	P.1 P 2	0	MECH MOTOR inverse CONTROL
55	MECH MOTOR	0	MOTOR ON SIGNAL
56	MTL SW	I	METAL TAPE "HI" (GND)
57 58 59	BIT 3 BIT 1 BIT 2	I	Input of cassette tape pack position detection signal
60	REEL PULS	I	Input of tape reel running pulse
61	TAPE IN	I	"HI" in TAPE IN
62	APC SENS	0	"LOW" in PLAY, "HI" in FF/REW
63	APC DET	I	"HI" in intermission between music, "LOW" in music
64	MTL ON	0	"HI" in METAL TAPE (OPEN)
65	FWD/REV	I	"LOW" in FWD, "HI" in REV
66	RDS DATA	I	RDS DATA input terminal
67	RDS CLK	I	RDS CLOCK input terminal
68	B/U DET	I	B/U detection terminal
69	ACC IN	I	CC detection terminal
70	KEY INT	I	TO 1 PIN
71	DOLBY ON	0	DOLBY ON SIGNAL
72	SYS MUTE	0	MUTE output, MUTE ON in "HI"
73	N.C.	I	Not in use
74	CPUREG	-	VDD
75	GND	_	GND .
76 77	XOUT XIN	0 I	Connected to quarts
78 79 80	OSC REG VDD RESET	_	VDD

# ■EXPLODED VIEW

Main section



### **PARTS LIST**

### Main section

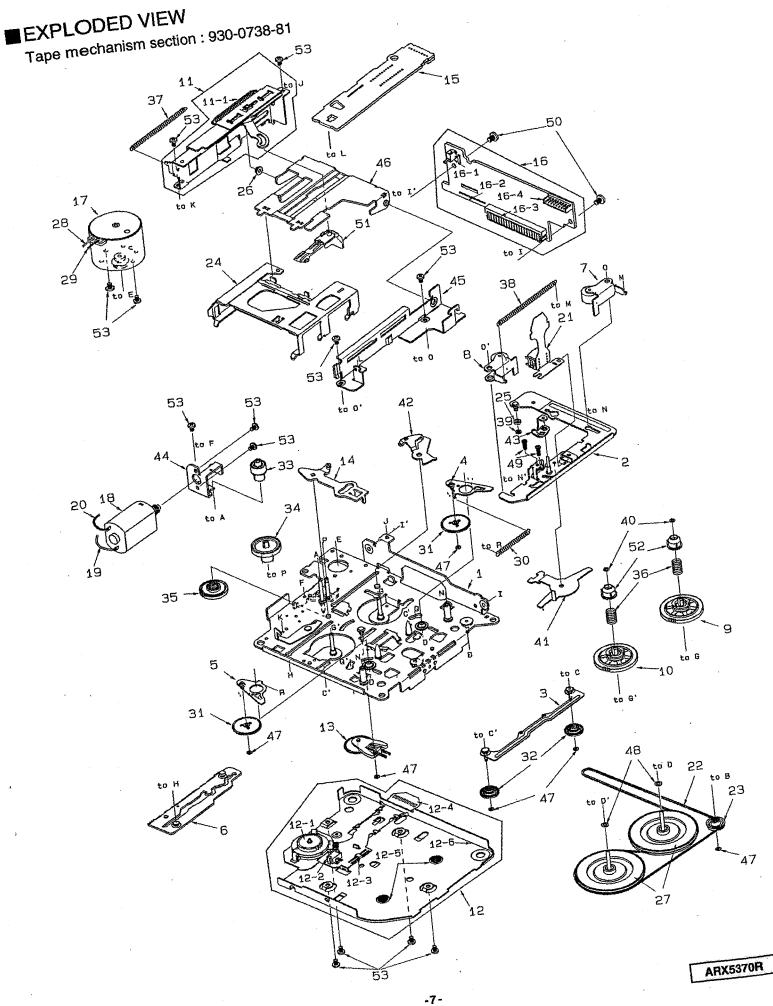
· NO.	PART NO.	DESCRIPTION	Q'TY	NO.	PART NO.	DESCRIPTION	Q'TY
1	940-1790A	DCP ASS'Y	1	4	291-0067-00	STICKER	1
1-1	378-0134-00	BADGE	1	5	370-5653-00	INNER ESCUTCHEON	1
1-2	370-5643-00	ESCUTCHEON	1	6	320-0526-26	DUSTPROOF COVER	1
1-3	331-1999-00	LCD COVER	1	7	382-4078-00	BUTTON (PUSH-OUT)	1
1-4	379-1074-41	INDICATION	1	8	750-3173-00	SPRING (PUSH-OUT)	2
1-5	347-5366-00	FILM	1	9	331-0588-20	HOOK PLATE	1
1-6	347-5365-00	FILM	1	10	716-0778-00	WAVE SCREW	2
1-7	335-5308-00	LCD ILLUMINATION PLATE	1	11	341-1627-00	SHAFT	1
1-8	335-5309-00	LCD HOLDER	1	12	335-5312-00	ноок	1
1-9	382-4421-23	BUTTON (4/B NR)	1	13	750-3219-00	SPRING (HOOK)	1
1-10	382-4422-21	BUTTON (5/>/II)	1	14	750-3217-00	SPRING (DOOR)	1
1-11	382-4423-23	BUTTON (6/BLS)	1	15	286-8674-00	SET PLATE	1
1-12	382-4418-21	BUTTON (1/SCN)	1	16	750-3137-00	SPRING	2
1-13	382-4419-21	BUTTON (2/RPT)	1	17	714-5008-41	MACHINE SCREW (M5×8)	2
1-14	382-4420-21	BUTTON (3/RDM)	1	18	714-3005-80	MACHINE SCREW (M3×5)	12
1-15	382-4413-20	BUTTON (TA)	1	19	345-7584-00	SLEEVE	2
1-16	382-4414-20	BUTTON (AF/NEWS)	1	20	855-8000-13	RCA LEAD	1
1-17	382-4468-00	BUTTON (EJECT)	1	21	335-0833-07	CABLE TIE	1
1-18	335-5301-00	BUTTON HOLDER	1	22	345-7560-00	RUBBER PART	2
1-19	345-7818-00	SPONGE (L)	1	23	039-0845-00	MAIN PWB	1
1-20	347-5402-00	SHADE (R)	1	24	074-1112-00	DCP CONNECTOR	1
1-21	335-5307-00	ILLUMINATION PLATE (L)	1	25	331-0606-00	CONNECTOR BRACKET	1
1-22	345-4441-81	LAMP CAP (YELLOW)	2	26	880-2080A	TUNER	1
1-23	017-0441-00	PILOT LAMP (9V 85mA)	2	27	009-9006-50	CHOKE	1
1-24	039-0847-00	SW PWB	1	28	092-9000-01	ANTENNA RECEPTACLE	1
1-25	345-4441-37	LAMP CAP (BLUE)	3	29	331-0643-00	EARTH PLATE	1
1-26	076-0522-00	DCP CONNECTOR	1	30	331-0613-00	IC HOLDER	1
1-27	017-0444-00	PILOT LAMP (14V 50mA)	3	31	051-2009-00	POWER IC (TDA8561Q)	2
1-28	013-6002-50	TACT SWITCH	10	32	714-3010-80	MACHINE SCREW (M3×10)	3
1-29	716-1721-00	P-TIGHT SCREW	7	33	313-1616-00	HEAT SINK	1
1-30	335-5294-00	REAR COVER	1	34	039-0841-00	CONNECTOR PWB	1
1-31	013-3812-11	TACT SWITCH	9	35	075-9003-00	RCA JACK (WHITE)	1
1-32	335-5304-00	ILLUMINATION PLATE (R)	1	36	075-9004-00	RCA JACK (RED)	1
1-33	345-7815-00		1	37	347-5100-00	SPACER (RCA)	1
1-34	335-5298-00	JOG ARM	1	38	331-1856-20	CONNECTOR HOLDER	1
1-35	335-5297-00	JOG PLATE	1	39	074-1022-01	CONNECTOR (13P)	1
1-36	382-4393-20	BUTTON (FUNC/POWER)	1	40	039-0428-00	C-BUS PWB	1
1-37	380-5394-20	BUTTON (VOL)	1	41 1/3	074-1115-10	ISO CONNECTOR	1
1-38	382-4394-22	BUTTON (BAND/A-M)	1	42	714-2610-10	MACHINE SCREW (M2.6×10)	1
1-39	382-4470-00	BUTTON (RELEASE)	1	43	060-0057-56	AUTO FUSE (10A)	1
1-40	382-4396-21	BUTTON (UP/DOWN)	1	44	850-6688-50	A-LEAD	1
1-41	335-4874-00	ILLUMINATION PLATE	1	45	310-1571-00	UPPER CASE	1
2	<b></b>	OUTER ESCUTCHEON	1	46	930-0738-81	TAPE MECHANISM	1
3	<del> </del>	MACHINE SCREW (M2×4)	1				ļ

Section 1

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ARX5370R



### **■**PARTS LIST

Tape mechanism section: 930-0738-81

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NO.	PART NO.	DESCRIPTION	Q'TY	NO.	PART NO.	DESCRIPTION	Q'TY
1	960-4294-21	DECK PLATE ASS'Y	1	22	602-0118-00	BELT	1
2	960-4261-05	HEAD PLATE ASS'Y	1	23	604-0046-00	TENSION PULLEY	1
3	960-4262-20	FF/REW-P-ASS'Y	1	24	606-0093-06	PACK GUIDE	1
4	960-4263-03	IDOLER-P-ASS'Y F	1	25	610-0342-01	HEAD-P-ROLLER	1
5	960-4264-03	IDOLER-P-ASS'Y R	1	26	610-0343-00	GUIDE-A-ROLLER	1
6	960-4266-20	MODE PLATE ASS'Y	1	27	611-0091-03	FLYWHEEL	2
7	960-4269-05	ROLLER ASS'Y F	1	28	802-4909-60	VINYL COAT WIRE(RED)	1
8	960-4270-05	ROLLER ASS'Y R	1	29	800-4909-60	VINYL COAT WIRE(BLK)	1
9	960-4348-02	REEL ASS'Y F	1	30	750-3017-02	IDOLER-P-SPRING	1
10	960-4349-02	REEL ASS'Y R	1	31	613-0285-02	IDOLER GEAR	2
11	960-4389-03	EJECT SUB ASS'Y	1	32	613-0286-02	FF/REW GEAR	2
11-1	750-3020-01	SW-PLATE SPRING	1	33	613-0288-01	HELICAL GEAR	1
12	960-4338-07	BOTTOM SUB ASS'Y	1	34.	613-0289-01	GEAR A	1
12-1	013-3951-11	SWITCH	1	35	613-0337-00	POWER GEAR	1
12-2	013-3953-01	SWITCH	1	36	750-2949-00	SLIDE SPRING	2
12-3	051-1776-00	IC	1	37	750-2947-04	EJECT-P-SPRING	1
12-4	099-9926-01	FLEXIBLE PWB	·- 1	38	750-2946-02	PINCH SPRING	1
12-5	746-0767-00	WASHER	2	39	746-0762-00	WASHER	1
12-6	960-4295-02	BOTTOM PLATE ASS'Y	1	40	746-0761-00	WASHER( <i>ϕ</i> 1.6)	2
13	960-4282-06	DETECT SUB ASS'Y	1	41	630-2597-01	CHANGE LINK	1
14	960-4301-02	PLAY LINK ASS'Y	- 1	42	630-2598-05	EJECT LINK	1
15	039-0053-00	SIDE PWB	1	43	630-2600-01	ADJUST LINK	1
15-1	074-0881-08	OUTLET SOCKET(8P)	1	44	630-2601-02	MOTOR PLATE	1
16	990-0709-01	REAR PWB ASS'Y	1	45	630-2626-04	PWB FRAME	1
16-1	013-3906-00	SWITCH	1	46	630-2642-01	GUIDE ARM	1
16-2	039-0368-00	REAR PWB	1	47	746-0724-00	WASHER(φ1.1)	6
16-3	074-0978-20	OUTLET SOCKET	1	48	746-0624-00	WASHER( ¢ 2.1)	2
16-4	076-0353-08		1	49	716-0833-10	AZIMUTH SCREW	2
17	SMA-153-100	MAIN MOTOR ASS'Y	. 1	50	716-0761-01	PWB SCREW	2
18	SMA-131-100	POWER MOTOR ASS'Y	1	51	631-1992-02	PACK STOPPER	1
19	<del></del>	VINYL COAT WIRE(WHT)	1	52	631-1993-01	SLIDE BUSH	2
20		VINYL COAT WIRE(BLU)	1	53	716-0484-00	SCREW(M2×2.5)	13
21	011-0307-28	<u> </u>	1				

# **■**ELECTRICAL PARTS LIST

Tape mechanism section

Note) Several different parts of the same reference number are alternative parts.

One of those parts is used in the set.

REF	No.	PART No.	DESCRIPTION	REF	No.	PART No.	DESCRIPTION	REF	No.	PART No.	DESCRIPTION
C	1	175-3311-00	330pF CH	С	14	183-2263-31	16V22 μF	R	9	117-1531-10	1/10W 15kΩ
C		175-3311-00		C	15	183-4753-51	35V4.7 μF	R	10	117-1531-10	1/10W 15kΩ
С	3	175-3311-00	330pF CH	C	16	183-4753-51	35V4.7 μF	R	11	117-1131-10	1/10W 11kΩ
c	4	175-3311-00	330pF CH	IC	1	051-1546-10	BA3430S	R	12	117-3341-10	1/10W 330kΩ
C	5	183-4763-11		IC	2	051-1776-00	NJL5801K	R	13	117-1811-10	1/10W 180Ω
c	6	042-0552-02	10V68 μF	R	1	111-1241-91	1/4WS 120kΩ	R	14	117-8211-10	1/10W 820 Ω
c		042-0552-02		R	2	111-1241-91	1/4WS 120kΩ	R	15	116-2231-10	1/8W 22kΩ
lc	8	173-1231-10	0.012 μF	R	3	111-1241-91	1/4WS 120kΩ	R	16	117-1031-10	1/10W 10kΩ
c	9	173-1231-10	0.012 μF	R	4	111-1241-91	1/4WS 120kΩ	R	17	117-1031-10	1/10W 10kΩ
lc i		183-4753-51	00 1 ,	R	5	116-1011-10		R	18	111-5611-91	1/4WS 560 Ω
c	11	183-1043-61	50V0.1 μF	R	6	116-1011-10	1/8W 100Ω	sw	1	013-3906-00	3PPB51
c		175-5611-00	, , , , , , , , , , , , , , , , , , ,	R	7		1/10W 330kΩ	sw	-	013-3953-01	
C	13	183-4743-61	50V0.47 μF	R	8	117-1131-10	1/10W 11kΩ	sw	3	013-3951-10	

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### SW PWB section

REF	No.	PART No.	DESCRIPTION	REF	No.	PART No.	DESCRIPTION	un Fi	REF	No.	PART No.	DESCRIPTION
С	101	178-1822-05	1800pF	R	103	117-2221-10	1/10W 2.2kΩ	*.	S	109	013-6002-50	
C	102	178-4735-06	0.047 μF	R	104	117-6831-10	1/10W 68kΩ		S	110	013-3812-11	
С	103	178-4735-06	0.047 μF	R	105	117-1031-10	1/10W 10k Ω	- 1	s	111	013-3812-11	
C	104	178-4735-06	0.047 μF				1/10W 120kΩ	- 8	s	112	013-3812-11	
CN	101	076-0522-00		R	107	117-3921-10	1/10W 3.9kΩ		s	113	013-6002-50	
IC	101	051-6013-00	LC75854W	s	101	013-6002-50	SPARE A.	1	s	114	013-6002-50	
PL	101	017-0441-00	9V 85mA	s	102	013-6002-50	113.5	- 5.	s	115	013-3812-11	
PL	102	017-0441-00	9V 85mA	S	103	013-3812-11	13.5	4	s	116	013-6002-50	
PL	103	017-0444-00	14V 50mA	S	104	013-6002-50	1.50	e	s	117	013-3812-11	
PL	104	017-0444-00	14V 50mA	s	105	013-6002-50		12	s	118	013-3812-11	
PL	105	017-0444-00	14V 50mA	S	106	013-3812-11		-4	s	119	013-6002-50	
R	101	117-2221-10	1/10W 2.2kΩ	S	107	013-3812-11		-	1			,
R	102	117-2221-10	1/10W 2.2kΩ	S	108	013-6002-50		1				, i

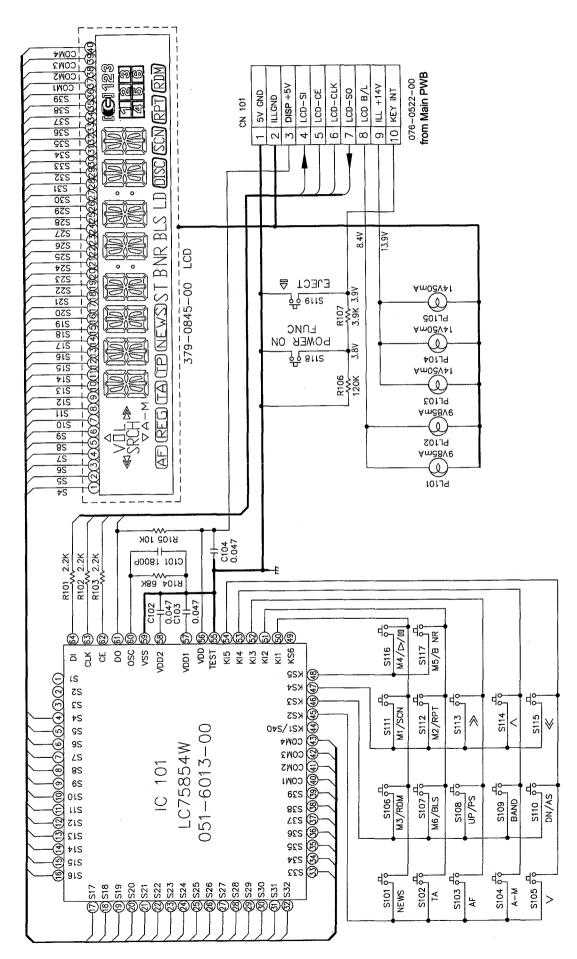
### Main PWB section

RE	No.	PART No.	DESCRIPTION	REF	No.	PART No.	DESCRIPTION	RE	No.	PART No.	DESCRIPTION
С	101	174-1800-13	18pF	С	402	182-2253-63	50V2.2 µF	С	801	173-1042-10	0.1 "F
C		178-1032-05		С		042-9003-00		C		042-9002-00	
C		178-1032-05		C	404	182-1053-63	·	l c	803	042-0002-00	50V0.47 μF
C		184-1073-22		C		178-1022-05		lic	804		50V0.47 μF
c		178-1022-05	, ,	C		182-1063-33	, .	lic		042-9002-00	50V0,47 pT
C		178-1022-05		C	407	182-2243-63	1 .	l c	806	042-0447-00	16V2200 μF
C		180-1053-63	•	C		182-2243-63		lic			
C		178-2732-05	'	C		182-2253-63		C		183-1063-31 183-1063-31	
C			0.027 μF	C	410	182-2253-63	1 '	C			
c		178-1522-05		C		178-1032-05	( ' ' '	C	010	183-1063-31	16V 10 µF
C		178-1032-05		C		176-1002-03		c	010	183-1063-31	10010 µF
C		178-6822-05		C	503	178-1032-05		C		178-1022-05	
C		178-0022-05		C	504					178-2232-05	
C		· ·	,	C	505	182-4763-23				074-1112-00	1
		178-1032-05	•	1 -		177-4732-05	•			075-9003-00	
C		184-2273-22		C	506	178-1032-05	, ,			075-9004-00	·
C		178-1222-05		C		042-9003-00	, ,	1 4	104	074-1112-00	
C		178-8222-05		C	508	178-1032-05	1 '	CN		076-9000-09	
C		183-3343-61		C	509	178-4732-05		CN	106	076-9000-03	
C		178-1032-05	· · · · · · · · · · · · · · · · · · ·	C		183-2253-61	l ' ' '	CN	107	076-0433-20	i ·
C		176-3311-00	•	C		184-1073-22		CN		074-1022-01	
C		176-3311-00	· ·	C			0.01 μFKY5R	D	101	001-0376-69	MTZ18JB
C		176-8201-00		C		180-1063-53		D	102	001-0330-00	1SS119
С		176-4701-00		C		182-4763-23		P		001-0330-00	
C		178-1042-05		C		182-1063-33		D	104	001-0376-69	MTZ18JB
C		183-2253-61		C			0.01 μ FKY5R	D	201	001-0330-00	155119
C		183-1063-31		C		178-1032-05		D		001-0330-00	
C		176-5611-00		C		1	0.01 μ FKY5R	D		001-0376-45	
С		176-5611-00	'	C		182-1063-33		D		001-0330-00	
C		176-5611-00		C	702	183-2253-61	•	D		001-0330-00	
С		178-2232-05	' '	C		178-4732-05		D	502	001-7800-00	SDL-3N2P-L
C		178-2232-05		C		183-2253-61		D		001-0330-00	
C		178-1032-05		C	705			P		001-0330-00	
С		177-3312-05		С		042-9003-00		P		001-0376-33	
С		178-1042-05	•	C		174-5600-13	• •	D		001-0330-00	
С	1	182-4743-63	' (	C	708			D		001-0330-00	1SS119
С		176-2701-00				182-4753-63		P		001-0376-48	
C		176-2701-00		C		178-8232-05		D		001-0376-48	
C		183-2253-61				182-2253-63		P		001-0376-36	
С		176-1011-00				182-2263-33		•		001-0330-00	,
C		176-1011-00				178-5622-05		ł		001-0376-45	MTZJ8.2C
C	1	176-1011-00				178-5632-05		1		001-0330-00	
C		176-1011-00				178-5622-05				001-0330-00	
C		178-1032-05		C	716	182-1063-33	16V10 μF	D	611	001-0466-00	S5688B
c		183-4763-11				174-5600-13		D	612	001-0330-00	1SS119
C		177-1042-05				176-1511-00			613	001-0330-00	1SS119
С		177-1022-05				182-4753-63				001-0376-23	
C		182-1073-33				178-8232-05	•			001-0376-29	
0000		177-1022-05				182-2253-63			802	001-0330-00	188119
C		177-1022-05				182-2263-33		1	803	001-0188-01	1S1885A
C		178-1022-05	•			178-5622-05				051-1819-00	
C		178-1022-05				178-5632-05				051-0350-55	
С		178-1022-05				178-5622-05				051-6201-00	
С		178-1022-05		С		182-1063-33				051-1014-10	
C	401	182-2253-63	50V2.2 μF	C	727	182-4763-23	10V47 μF	IC_	401	051-1349-10	HA12134AF

REF	No.	PART No.	DESCRIPTION	RE	F Ńo.	PART No.	DESCRIPTION		RE	= No.	PART No.	DESCRIPTION
iC	501	052-1906-00	μPD178006GC-513	R	114	111-2221-91	1/4WS 2.2kΩ	7	R	605	111-1021-91	
1			3B9	R		116-2221-10		1 1	R	<b>6</b> 06	111-1091-91	1/4WS 1 Ω
IC		051-0160-01	1	R		117-1231-10		1 1	R		111-1091-91	
IC		051-5008-00		R		1	1/4WS 270 Ω		R	608		1/2WS 470 Ω
IC		051-2009-00	1 1	R	118	E .	1/4WS 330 Ω		R	609	111-1091-91	
IC	-	051-2009-00	l i	R	201	1 .	1/10W 10kΩ	.1 1	R		111-1091-91	
ŀ		010-9000-05 010-9000-05		R	202	1 .	1/10W 10kΩ 1/10W 2.2kΩ		R R		į.	1/2WS 470 Ω
ŀ	102 201	010-9000-03		R	203		1/10W 2.2kΩ 1/10W 33kΩ		n R			1/10W 100kΩ 1/10W 100kΩ
-		010-9000-01	1 ' \ 1	R	205		1/10W 3.3kΩ	- 1	R			1/2WS 560 Ω
F	502	010-9000-01	la constant and the second second	R	206	1	1/10W 22kΩ		R			1/4WS 10kΩ
Ĭ.		010-9000-01	, , ,	R		ì	1/10W 10kΩ		R	616	117-1031-10	1/10W 10kΩ
Ĺ	801	009-9006-50		R	208	1	1/10W 12kΩ	- 1	R	617		1/4WS 1.5Ω
Q	101	108-0669-00	2SK669	R	209	117-3331-10	1/10W 33kΩ		R	618	1 '	1/4WS 1.5Ω
Q	102	100-1548-00	2SA1548	R	210	117-1021-10	1/10W 1kΩ		R	619	111-1591-91	1/4WS 1.5Ω
Q	103	100-1548-00	2SA1548	R	211	117-2241-10	1/10W 220kΩ		R	620		1/4WS 1.5Ω
Q	201	125-0003-02	RN2202	R	212	117-1041-10	1/10W 100kΩ	1	R			1/10W 10kΩ
Q	202	103-1450-00	1	R		1	1/10W 2.2kΩ	- 13	R			1/4WS 2.2kΩ
Q	203	125-0003-02	1 . 1	R	214	117-1021-10	!		R	623		1/4WS 10kΩ
Q	204	125-2003-02	1 1	R	215	117-1021-10	i '		R		1 .	1/4WS 1.2kΩ
Q	205	125-2003-02	]	R	216	117-1021-10		1 1	R			1/10W 4.7kΩ
Q	301	101-1243-00	1 1	R	217	117-1021-10			R	626	116-2231-10	
Q	302	125-2003-06	1 1	R	218		1/10W 10kΩ		R	627		1/2WS 560 Ω
QQ	303 304	101-1243-00 125-2003-06		R R	219 220	3	1/10W 10kΩ 1/10W 10kΩ		R R	628 629	1	1/4WS 10kΩ
a	501	125-2003-00	i 1	R.	301	ſ	1/2WS 680 Ω		n R	630	1	1/10W 15kΩ 1/2WS 470Ω
Q	502		2SC2458GR,BL	R	302	1	1/4WS 10kΩ	8 8	R	631		1/4WS 22kΩ
Q	503		2SC2458GR,BL	R	303	114-2291-11	1		R	632		1/4WS 22kΩ
Q	504	125-2003-02	1 ' 1	R			1/4WS 2.2kΩ	11	R		1	1/10W 100kΩ
Q	505	125-2003-02	1 . 1	R	305	1	1/2WS 680 Ω		R	701	l.	1/10W 47kΩ
Q	601	101-1237-00	1 . 1	R			1/4WS 10kΩ		R	702		1/10W 68kΩ
Q		102-1846-50	1	R		117-1031-10			R			1/10W 6.8kΩ
Q	603	103-1858-00	2SD1858	R	401	1	1/10W 18kΩ	ij	R			1/10W 12kΩ
Q	604	103-1858-00	2SD1858	R	402	116-2231-10	1/8W 22kΩ	П	R	705	117-1531-10	1/10W 15kΩ
Q	605	103-1858-00	2SD1858	R	501	111-2221-91	1/4WS 2.2kΩ	Ш	R			1/10W 24kΩ
Q	606	103-1858-00	) 8	R	502		1/4WS 2.2kΩ		R	707		1/10W 6.8kΩ
Q	607	125-0003-02	1	R			1/10W 4.7kΩ	- 11	R			1/10W 47kΩ
Q	608		2SC2458GR,BL	R	504	1	1/10W 5.6kΩ		R			1/10W 68kΩ
Q	609	101-1243-00		R		117-1031-10			R			1/10W 6.8kΩ
Q	610	125-2003-02	1 1	R		117-1031-10		11	R			1/10W 12kΩ
Q	611 612	100-1048-00		R		117-1021-10 117-1031-10		11	R R			1/10W 15kΩ
QQ	•	125-2003-02	i i	R		117-1031-10			n R			1/10W 24kΩ 1/10W 6.8kΩ
Q		125-2003-02	:	R		117-1031-10		11	R			1/4WS 330 Ω
Q		125-2003-02		R		117-1031-10			R			1/10W 3.3kΩ
Q		101-1243-00		R		111-1031-91			R			1/10W 4.7kΩ
Q	617	125-2003-02	1 1	R		117-1031-10			R			1/10W 4.7kΩ
Q	618	125-2003-02	RN1202	R	514	117-1031-10	1/10W 10kΩ	-11	R			1/10W 4.7kΩ
Q	619	125-0003-02	RN2202	R	515	117-1031-10	1/10W 10kΩ	Ш	R			1/10W 4.7kΩ
Q	801	103-1450-00		R	516	117-4731-10	1/10W 47kΩ	11	R	806	117-3311-10	1/10W 330 Ω
Q		103-1450-00		R		117-2231-10			R			1/10W 10kΩ
Q		103-1450-00		R		117-4731-10			R			1/10W 330 Ω
Q	804	103-1450-00		R		117-2231-10		1.1	R			1/10W 10kΩ
Q		125-2003-02		R		117-1031-10						1/10W 5.6kΩ
Q		125-0003-02		R		117-1021-10						1/10W 5.6kΩ
R		117-5631-10		R		116-1021-10						1/10W 10kΩ
R		117-1831-10 117-1021-10		R R		117-1021-10		1 3				1/10W 10kΩ =
		117-1021-10				117-1021-10						1/10W 330 Ω
R		117-5631-10		R R		117-1021-10 117-1021-10						1/10W 330 Ω
R		117-1231-10		R		117-1021-10			r R	917	117-5021-10	1/10W 5.6kΩ 1/10W 5.6kΩ
R		117-1021-10		R	,	111-1001-91			√P	401	012-9000-18	10kΩ
R		117-4721-10		R		117-1021-10						10kΩ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
R		117-2211-10		R		111-4711-81			ν ι τ Κ			4.332MHz 56
R		117-1031-10		R		111-1021-91					061-9002-50	
R	111	116-2221-10	1/8W 2.2kΩ	R	602	111-1031-91	1/4WS 10kΩ	-		1	1	CST4.5MGW
R		111-1031-91		R		117-2231-10		Ш		[	m:4 ; .	θ* - Ç\$
R		111-1031-91	. كخصيب السياد المساحد	R	604		1/10W 12kΩ				· .	·*.
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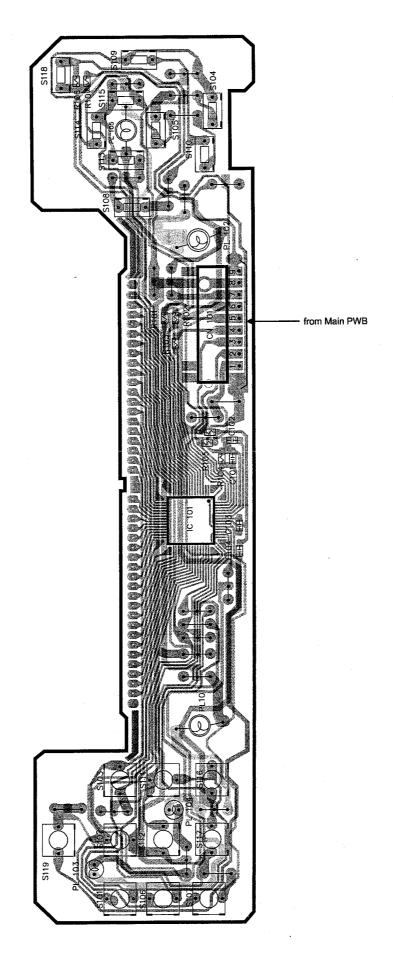
### **CIRCUIT DIAGRAM**

SW PWB section



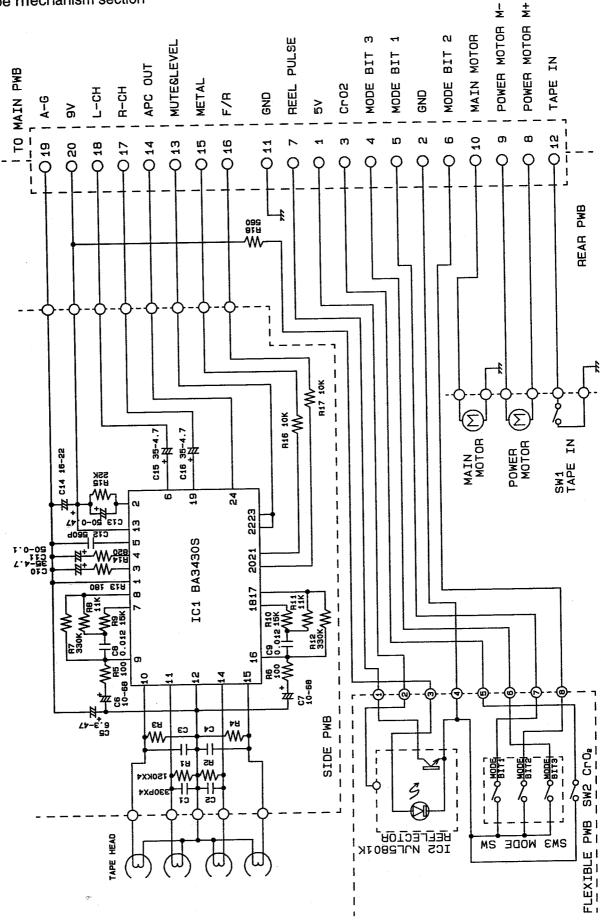
# ■PRINTED WIRING BOARD

SW PWB section



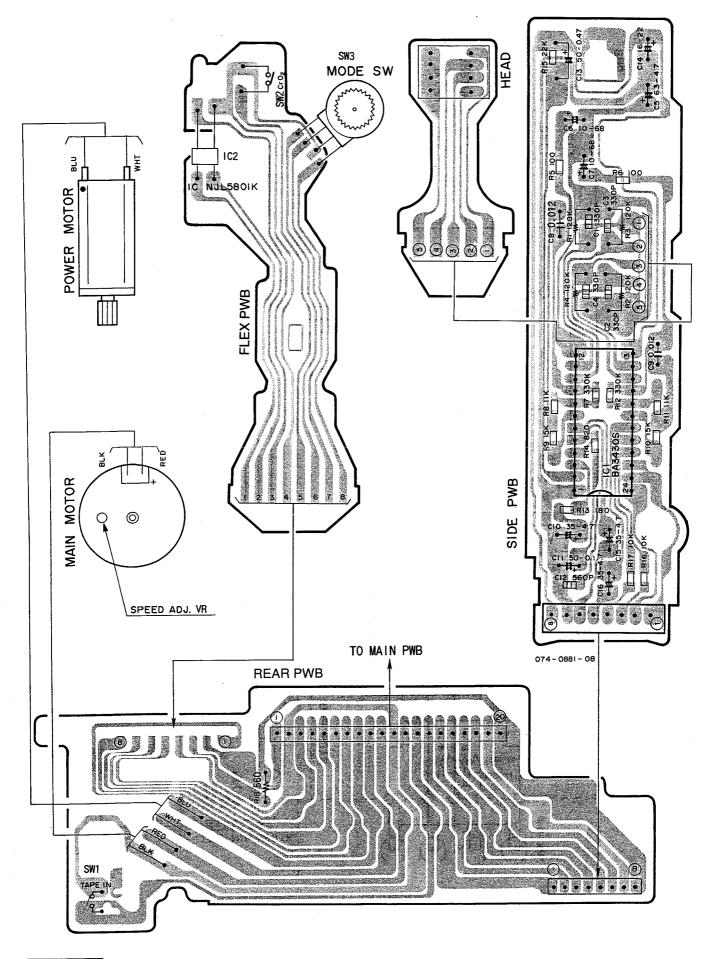
## **■**CIRCUIT DIAGRAM

Tape mechanism section



## ■PRINTED WIRING BOARD

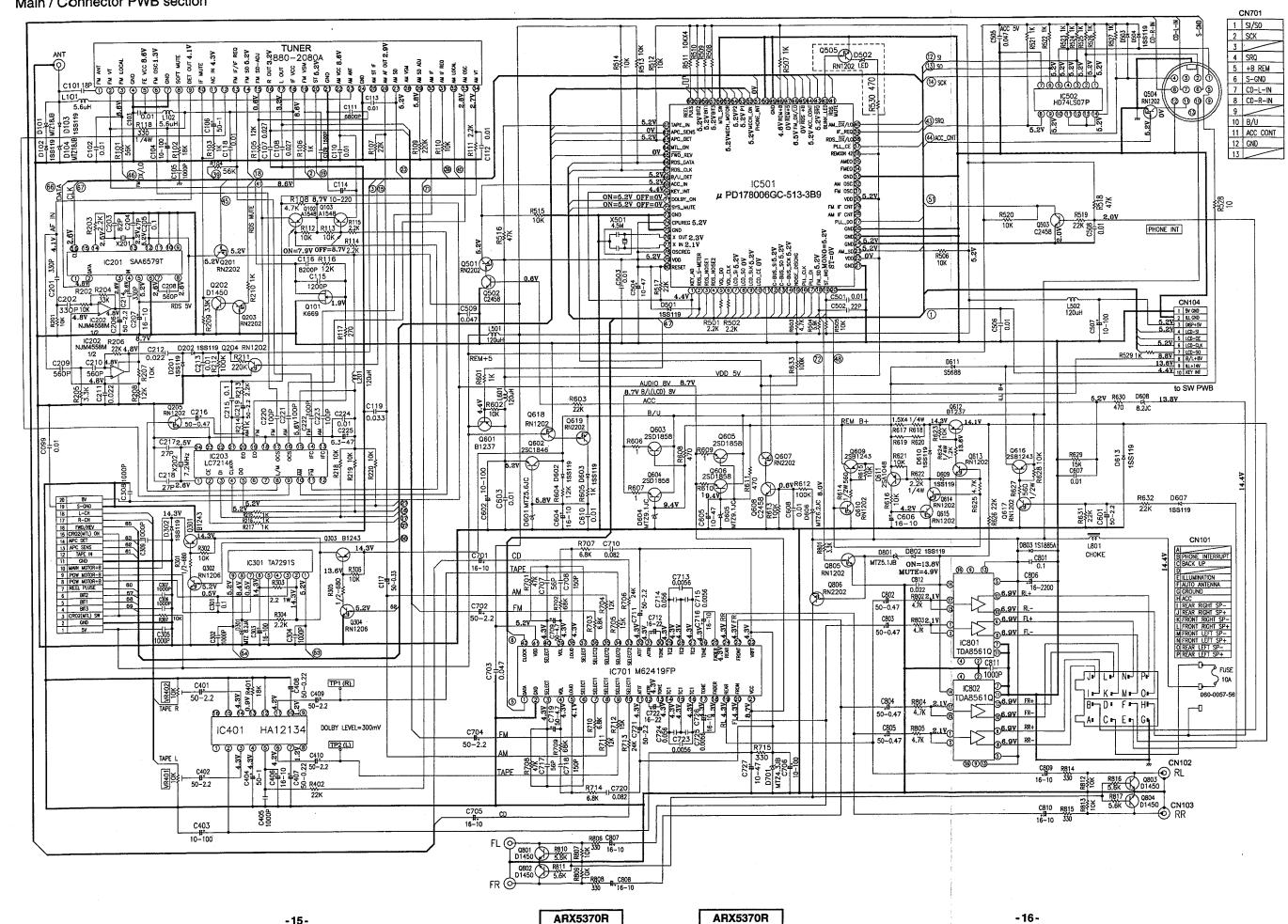
Tape mechanism section



### **CIRCUIT DIAGRAM**

Main / Connector PWB section

-15-



### ■PRINTED WIRING BOARD

